ACS 1803 Assignment 4

Due: **November 28, 2019 (1803-052)**

Submit: **Kerry Augustine**
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Total 30 marks.

To be done individually.

Part A (20 marks)

Read the following scenario, and respond to the requirement: The Company you work for is purchasing brand new computers to replace the old outdated ones that it has had in its offices. Your Company wants to be able to utilize the Internet to enable the staff to connect to external web services in performing their work. A local distributor has been contacted, requesting specifications of the types of computers they offer for businesses. They have responded providing specifications for two different types of computers. Your boss has requested that you write a report with your recommendations regarding which option is the best. Write a 2 - 3 page report with your recommendation, specifying reasons for your recommendation. Please make sure that all technical concepts are explained on the report.

- Describe the type of business that you work for (i.e. business type, industry, services provided). You may also make up the business.
- Describe the importance of the technology purchase to the business.
- Describe how each of the key technology components (included on the specifications sheet) work.
- Describe how a typical web session works while referencing some of the key network technology components.

Additional Notes:
- You may make whatever assumptions you would like to support your case.
- Please make sure that all technical concepts (described in the specifications for each computer hardware/software) are explained on the report. The specifications provided for each of the Proposed computer models are shown on the next page.
- On your report, include explanation for each component included on the specification sheet, and make sure that your explanations are written in a language that your boss, a non-technical individual, is able to understand easily.
- Refer to the lecture notes, text, and research the Internet (if required) to complete your analysis and report. Please be sure that you reference your research source(s).

The specifications provided for each of the Proposed computer models are below (see next page for details):

Computer Hardware	
Computer1 (Laptop)	**Computer2 (Desktop)**

Computer1 (Laptop)		Computer2 (Desktop)	
Operating System	Windows® 10 Home, 64bit	Operating System	Windows® 10 Pro (64-bit)
Processor	Intel® Core™ i7-7700HQ 2.8GHz Quad Core Processor w/ 3.8GHz Turbo, 8 Threads, 6MB Smart Cache, 14nm	Processor	Intel® Core™ i5-6500 w/ 3.2GHz, Quad-core, 6MB cache
Chipset	Intel® HM175 Express Chipset	Chipset	Intel® H110
Memory	16GB DDR4-2133 So-DIMM RAM	Memory	4GB DDR4-2133 SDDIMM, 32GB max., dual slots
Display	15.6" 16:9 Full HD (1,920 x 1,080) LED LCD Display	Graphics	Integrated Intel® HD graphics
Graphics	NVIDIA® GeForce® GTX1050 w/ 4GB GDDR5 VRAM		
Storage	1x 256GB SATA SSD 1x 1TB 7,200 RPM SATA HDD	Storage	500GB 7200 rpm SATA HDD
Optical Drive	N/A	Optical Drive	DVD±RW
Card Reader	SD / MMC Card Reader	Card Reader	3-in-1 SD media card reader
		Storage Bays	Up to: 1 x 2.5" or 3.5" SATA III HDD / SSD
Audio	2 Speaker Stereo System Dual Array Noise Canceling Microphone ASUS SonicMaster Premium Technology		
		Audio	Integrated HD audio with Realtek ALC3252 codec
Camera	720p Web Camera		
Ethernet	1x Gigabit Ethernet RJ45 port	Ethernet	Integrated Realtek RTL8111HSH-CG 10/100/1000M GbE LAN
Wireless LAN	WiFi: 802.11 ac w/ 2x2 Antennas	Wireless LAN	N/A
Bluetooth	Bluetooth 4.1	Bluetooth	N/A
Keyboard	ASUS AURA RGB LED Illuminated Keyboard w/ Numeric Keypad 4 Hotkeys 1.8mm Key Travel Anti Ghosting 4 LED Color Control Zones 20 Million Keystrokes Rated	I/O Interface	Front: 2 x USB 3.0 ports 1 x Headphone/microphone combo jack Rear: 6 x USB 2.0 ports 1 x HDMI port 1 x VGA 1 x RJ-45 1 x Audio line in 1 x Audio line out Internal: 1 x PCIe x16 (3.0) 1 x PCIe x1 (2.0)
Touch Pad	Touch Pad with Multi Touch and 2 Buttons		
I/O Ports	1x USB 3.1 Type C Gen1 port 3x USB 3.0 Type-A ports 1x USB 2.0 Type-A port 1x HDMI port 1x mini DisplayPort port 1x RJ45 LAN Jack for LAN insert 1x 3.5mm Combo Headphone-out & Audio-in Combo Jack 1x SD / MMC Card Reader		

Computer Software		
Specifications	**Computer1 (Laptop)**	**Computer2 (Desktop)**
System Software:	Windows 10 Home	Windows 10 Pro
Application Software	Office 2016	Office 365
Utility Software:	Antivirus, Spyware detection, Firewall, Filebackup software, Data compression	Antivirus, Spyware detection, Firewall All installed

Part B (10 Marks)

Your friend wants to start an ecommerce website to commercialize some crafts she has been creating. She has approached you for an explanation on the basics to start an ecommerce website.

Write a 1 - 2 page essay explaining to your friend what she needs to know to begin an e-commerce website. As part of your essay make sure you include:

- A definition of what ecommerce is.
- A definition of the Internet and the World Wide Web, and how they are used to facilitate ecommerce.
- Categories of ecommerce, and the category that your friend would be implementing.
- How the key components of an eBusiness solution work (front end/ back end).
- The steps your friend would follow to set up an ecommerce website:
    - Selecting an eCommerce business strategy
    - Getting a domain name
    - Developing a site (tools, design, services)
    - Deciding whether to develop/host the site herself or seek an external host service provider (identify the pros/cons of each decision)
    - Implementing a method to collect payments
    - Establishing basic management methods to mitigate typical security threats (describe some typical threats)